HURD (H. M.)

A PLEA FOR SYSTEMATIC THERAPEUTICAL, CLINICAL AND STATISTICAL STUDY.

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The treatment of insanity in America during the past half century, reflects great credit upon the able and energetic members of the medical profession, who have had the responsible management of institutions for the insane. They found the unfortunate victims of mental disease in poor-houses, jails, cells, cages, pens and receptacles; and their rational treatment wholly neglected. Through their efforts mainly, asylums and hospitals for the insane were erected, organized, equipped and placed in successful operation. They toiled oftentimes in opposition to strained ideas of public economy, born of the hard discipline of pioneer life, or of the straitened circumstances of States whose bone and sinew had been freely given to develop new States. They were obliged to meet the intemperate zeal of professional philanthropists, and the stringent requirements of a race, jealous of the rights and privileges of all except the sovereign people. Through their efforts the asylums of the country have been made comfortable abodes for a sorely afflicted class of citizens, and nearly one hundred well constructed, thoroughly equipped and carefully organized institutions for the care and treatment of the insane, attest their zeal and fidelity. All honor to the self-sacrificing men who have labored continuously, earnestly and efficiently to give practical form to the

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important truth that the State must provide for all of her insane in properly equipped hospitals or asylums. Its wisdom and necessity are universally recognized, and the completion of institutions now in process of construction, will render it practicable everywhere, except, perhaps, in the growing States of the south and west.

The work of construction is over, the scaffolding has been removed from the edifice; the completed building is before us. A new era with new requirements has already opened; a new departure is inevitable. It is a favorable time to inquire in what manner greater efficiency can be given to the professional work of institutions for the insane. Once constructed they should be developed and their usefulness increased. Out of the wide range of topics which naturally suggest themselves, it is possible to touch briefly and imperfectly upon a few subjects only, without much regard to logical order or sequence.

I. Therapeutical Study.—Greater attention should be given to the therapeutics of insanity. Nihilism in medicine begets neglect of proper and efficient study of new and useful remedies. Quiet, nutritious food, absolute rest, freedom from care, carefully prescribed moral treatment, judiciously selected means of employment or of amusement, regular exercise, regular sleep, regular meals, etc., these all contribute powerfully to the restoration of exhausted nerve tissue. The insane could not be cured without them; many are not cured by them. The proportion of persons who lapse into incurability, or who make imperfect recoveries, is increasing. Under our present high-pressure modes of living, the nerve constitution of the race is deteriorating. Insane persons do not build up as rapidly or as thor-

oughly as when the national stock was fresh from the farm and vigorous from open-air life. Living generally is more luxurious, and the reaction of the system after nutrition and rest is less prompt. Attacks of acute mania are comparatively infrequent, and diseases which are associated with degenerative brain changes are more abundant. Agents which modify mental action, and tend to remove insane conditions, need to be generally studied and widely employed. A good illustration of the class of remedies which requires to be studied, will be found in a brief *résume* of the wide range of therapeutic application of hyoscyamin, which seems to exert a marvellous influence over morbid mental action. It is of special benefit in relapsing cases of mania, and frequently aborts impending paroxysms of excitement. A single administration of a moderate dose often destroys the power of a delusion, and is followed by a return of healthy mental action. It modifies the excitement of acute mania, controls the characteristic distress of melancholia, and relieves the extreme restlessness of chronic mania and of some forms of general paresis. It frequently increases the appetite, promotes sleep, and renders the patients' condition vastly more comfortable, even where it fails to cure. Given by hypodermic injection it acts promptly and efficiently, and without impairing the appetite or nutrition.

The use of ergotin may also be mentioned. It seems unusually serviceable in the epileptic state, where exhaustion seems impending, as evidenced by a lax skin, contracted pupils, profuse perspirations and general vaso-motor paresis. In many instances, it seems to snatch the unfortunate epileptic from the very arms of death. When administered by hypodermic injection, the skin becomes dry, the pupil dilates, bodily functions resume their normal action, and vaso-motor disturbance disappears.

Codeia is another remedy of great value in a class of cases when the action of hyoscyamin is not beneficial. It is especially useful in cases of melancholia characterized by vague distress, or distinctly painful delusions. It relieves restlessness by stimulating the intellectual centers, and modifies the excitement dependent upon cerebral anæmia. Other equally useful remedies might be mentioned, but the above will suffice to indicate the range of therapeutic study desirable. It should be of the alkaloids, and of the essential principles of drugs, selecting those whose actions are known to be expended upon the nervous system, without disordering bodily function, or interfering with nutrition or assimilation. These essential drug principles should be carefully studied, not alone with the hope of searching out applications of them to modify excitement, or depression, or restlessness, or sleeplessness, or untidiness of habit and the like, but also to restore exhausted nerve fibre, stimulate to healthy action brain cells which are undergoing degenerative changes, and to arrest tendencies to dementia. Much might be accomplished by the concerted action of several institutions, in therapeutic study, and many new valuable remedial agents could undoubtedly be developed, and the range of therapeutic application of those already known widely increased.

II. The Clinical Study of Forms of Mental Disease.—The vexed question of the proper classification of forms of insanity can alone be determined by a careful study of the different forms met with in hospital wards. At present, the direction of the professional mind seems to be toward the formation of groups of insanity in association with certain stages of life and around predominant mental characteristics. In no other manner can we convey to ourselves, as medical

officers, and to the medical profession at large, such precise information respecting the actual condition of insane patients, and the prognosis and treatment of their disease. The different forms of general paresis should be especially studied and discriminated. Under this general title are included a variety of forms of disease which have little in common, except the characteristic loss of muscular control which marks the gait, the speech and the facial expression. The mental states of this disease vary widely. Some patients are ecstatic, joyous, happy, complacent, rich, powerful; others are depressed, anxious, irritable, moody, and unhappy. One patient is quiet but fully absorbed in extravagant delusions; another is restless, combative, subject to outbursts of maniacal fury and devoid of self-control. In one, the disease runs a rapid course; in another, it extends over a period of ten or fifteen years. Again, one patient is ataxic from the commencement of his disease and can scarcely walk; another is capable of sustained exertion and shows little actual diminution of muscular power. One patient writes a clear, legible hand, omitting very few letters or words; another scrawls illegibly, omitting words and sentences, or is too tremulous to put his pen upon paper. The *stage* of the patient's disease does not seem to have as much bearing upon these points as its seat in the nervous system. It is easy to regard them all alike cases of general paresis and all equally incurable, but the varying duration of the disease in different individuals suggests the possibility that treatment may avail to arrest its progress if promptly and correctly applied.

Preliminary to this there should be—

First. A thorough and systematic study of its causation. By so doing, one form of disease, which

has often been classed with it—I refer to syphilitic insanity—will be excluded. In this disease, under the employment of anti-syphilitic remedies, there is reasonable ground to anticipate substantial improvement. Such I imagine to be the cases of ataxia, which, in the experience of certain neurologists, have been cured by iodide of potassium. To ascertain their causation will suffice to exclude them from the list of true cases of general paresis. From two cases of general paresis which have recently come under my observation, I am inclined to think that the disease is frequently much more rapid in its development than has been previously supposed. As one of them had been under my daily observation for nearly a year previous to the development of insanity, a detailed statement may be of interest.

A gentleman, about sixty years of age, possessing much more than ordinary mental vigor, had suffered for many years from chronic rheumatism, and had received the usual round of treatment without benefit. Finally, in despair because no reputable physician would promise to heal him, he put himself under the medical charge of an ignorant man who had a secret remedy which he warranted to cure him. It was subsequently ascertained that this was composed largely of stimulating essential oils, opium and ethers. Its effect was to produce a rapid stimulation of both physical and mental functions. In less than a week the unfortunate patient became sleepless, loquacious, excitable, indifferent to pain and manifestly unnatural in conduct and conversation. During the month in which he continued to use the remedy, he slept less than two hours each night. He developed wild business schemes, planned extravagant changes in his residence, and showed great mental exaltation in all that he said and did. When the pernicious drugs were withdrawn a

temporary improvement in mental condition followed. Before many weeks, however, the extravagant delusions of the general paretic reappeared; his facial expression displayed the change characteristic of the disease; his handwriting became ataxic; in short, general paresis was developed.

Here, the disease was undoubtedly due to continuous over-stimulation, as no traces of mental disease had been apparent before the use of the stimulating remedy. In another case, the disease developed within a few weeks after the patient had been on a prolonged spree. I should be gratified to know whether similar facts have come under the observation of other members of the Association. A recent writer ascribes the development of general paresis in one case which he mentions, to a blow upon the head. It has also been ascribed to sunstroke, exposure to furnace heat, etc. The above and similar cases lend countenance to the view that this disease is frequently produced rapidly and gives equal reason to hope that prompt and energetic treatment may suffice to arrest its progress.

Second. The clinical symptoms of general paresis should be systematically studied with the expectation of associating the mental phenomena observed with the gross regional brain changes found post mortem, as well as with the microscopic appearances discerned upon a minute examination. The disorders of speech and of writing, the transitory paralysis following paretic seizures, and the progressive loss of muscular control, all furnish valuable hints as to the location of the morbid process in the brain, when viewed in the light of recent researches in the localization of brain functions. Systematic observation of the clinical phenomena of a large number of cases of general paresis will undoubtedly establish definite relations between the mental

symptoms and the pathological state. It is to be hoped also that more definite data will be supplied for prognosis. A study of the clinical features of general paresis would seem to indicate the existence of at least four varieties.

The first variety is marked by extravagant delusions from the commencement. Disorders of speech and of motility are observed early, and make rapid progress. The disease runs a rapid course, and toward its termination is marked by profound failure of mind and body.

The second variety is similar to the first in the rapidity with which the disease runs its course. Instead of delusions of wealth and importance, there are delusions of fear and apprehension, generally relating to the spiritual condition or the bodily health of the patient. In rare instances, these delusions of apprehension alternate with delusions of wealth or of power. The latter, however, are generally of brief duration, and the predominant symptoms are those of depression.

A third variety is characterized by extreme dementia. The patient lacks mental vigor, sense of propriety, or a realization of his condition; is childish, vain, or simply fatuous, and excessively good-natured. There is marked ataxia, but it does not progress rapidly, and the condition of the patient, both physically and mentally, seems stationary.

A fourth variety is where there seems to be simply an exaltation of mental function, and a sense of well being. The patient displays a degree of acumen, and his intellectual operations are often characterized by considerable force. He lacks judgment and a sense of the proper fitness of things. He is generally confident of his ability to do, but is not inclined to put his schemes into practical operation. The amount of ataxia, in gait and speech, is not marked. At the

same time it is noticeable. This variety is extremely protracted, and it is in patients suffering from this form that remissions and apparent recoveries occur.

The above varieties are undoubtedly often commingled, and many cases come under observation where these symptoms are all found at different stages of the disease. At the same time, in scrutinizing carefully cases of this form of disease, in every large hospital these general varieties may be easily observed and clearly distinguished. I would not be understood as ignoring the necessity of an equally careful study of the pathological appearances of general paresis. Pathological researches should go hand in hand with clinical study. They can not be separated. I emphasize the necessity of closer clinical study, because the tendency of medical investigation, at present, seems to be largely toward pathology. To treat general paresis successfully and intelligently, these clinical varieties should be carefully discriminated.

Treatment of General Paresis.—As this disease has thus far baffled all special effort to arrest it, I may be pardoned for briefly referring to the necessity of renewed attention to its curative treatment. A thorough and careful trial should be made of all remedies calculated to arrest inflammatory processes. By analogy of other diseases, it would seem as if enforced quiet, with nutritious food, careful, unirritating personal attention, the absence of everything calculated to excite thought or emotion, the administration of arterial sedatives, cold affusions to the surface, the exhibition of the iodides or the mercurials, etc., with counter-irritation to the scalp, would give promise of benefit. This, of course, is more practicable in the initial stages of the disease. If there is reason to think that the earlier

stages have passed and degenerative processes have already set in, the administration of metallic tonics like oxide of zinc or chloride of barium is indicated. In several instances under my observation, marked benefit has followed the use of the latter remedy. One patient who had lost the power of speech from ataxia, and was feeble and helpless in the extreme, partially regained speech under its use, and is enjoying an unexpected period of remission. I do not suppose it arrests the progress of disease in these cases, but simply renders the portions of brain-tissue which remain unaffected, more potent. If there are evidences of exhaustion, in consequence of too rapid tissue changes, as shown by intense excitement, sleeplessness, a foul breath and disorders of digestion, restorative remedies like Fowler's solution, alcoholics or quinine, are frequently of great service. The iodide of potassium with ergot should be administered where there is marked ataxia in the movements of the lower extremities. There is also reason to think that the use of the continued electric current will be extremely beneficial to these cases. No case should be considered beyond the reach of remedial measures. In the most hopeless, remissions of the disease frequently occur, and lend the hope that much may yet be accomplished for its unfortunate victims.

I have spoken of general paresis with perhaps tedious minuteness, because it well illustrated the sort of study which seemed in danger of being neglected in the multiplicity of cases which come under observation. The disease is no more important and no less important than other forms of mental disease.

An equally interesting field of investigation is found in epilepsy. There are at least half a dozen forms of this disease, the pathology and treatment of which

differ widely. Some of them are curable; all deserve close study and careful discrimination.

The same is true of dementia. The forms and degrees of dementia differ almost as widely as the varieties of general paresis, and their careful study involves many perplexing problems. How can the tendency to dementia be arrested after attacks of acute disease? How can the demented patient be re-educated without danger of re-awakening excitement? How can the patient, demented in consequence of a hemiplegia, be educated, to use to the best advantage, his crippled brain? Investigations can be made more thoroughly, and vexed problems can be settled more satisfactorily in connection with asylum work than elsewhere. It is due to the profession at large that every effort be made to extend medical knowledge in the direction indicated.

Much also could be accomplished in the way of clinical observation, by the concerted action of several institutions for the insane. One, perhaps, is located where large numbers of general paretics are admitted yearly; another receives an undue proportion of epileptics, and a third, cases of chronic dementia or other chronic forms of disease. The first could make and report a series of observations upon general paresis, the second upon epilepsy, etc.

III. Statistical Results.—Much of the present statistical information contained in the published reports of institutions for the insane is unsatisfactory. There are tables enough, but they lack uniformity, precision in statement and practical utility.

Their lack of uniformity is well illustrated by the varying number of tables given in different reports, taken at random from a package before me.

Thus, Brigham Hall presents none; the Friends' Asylum, eight; the Hartford Retreat, nine; the Asylum for Insane Criminals, at Auburn, New York, sixteen; the London Asylum, fifteen; the Maryland Hospital, twenty-four; the Michigan Asylum, ten; the Northampton Hospital, thirty-five; the Nova Scotia Asylum, twenty-two; the Pennsylvania Hospital, fourteen; the Taunton Hospital, twenty-four; the Worcester Hospital, twelve; and the Willard Asylum, thirteen; and yet none of these cover identical points or furnish information which can be compared with any profit.

Take, as an example, the table of "Forms of Insanity," to which one instinctively turns upon opening a report. Several of our most successful institutions, like the Pennsylvania Hospital and the Friends' Asylum, omit this table altogether.

The Hartford Retreat classifies the forms of insanity treated there, as follows: Mania acute, mania chronic, mania epileptic, mania suicidal, mania homicidal, mania periodical; melancholia acute, melancholia chronic, melancholia attonita; general paresis; methomania; dementia acute, dementia chronic, dementia senile; imbecility; moral insanity; not insane; unknown—eighteen separate forms.

The Auburn Asylum for Insane Criminals gives the following: Mania acute, mania sub-acute, mania chronic, mania periodic, mania paroxysmal; melancholia; epilepsy, epilepsy with mania; paresis; not insane—ten forms.

The Vermont Asylum gives the following forms: Mania, mania chronic; melancholia; dementia, dementia chronic; dipsomania—six forms only; no paresis, epilepsy, dementia after paralysis, etc.

The Willard Asylum gives: Dementia; chronic mania, paroxysmal mania, periodic mania, acute mania,

puerperal mania; melancholia; paresis; imbecility; not insane—eleven classifications.

The Maryland Hospital gives: Melancholia; mania, mania with paralysis, mania with epilepsy, mania hysteric; dementia, dementia acute, dementia senile, dementia with paralysis; paresis; imbecility; idiocy—twelve forms.

The Worcester Asylum for Chronic Insane gives: Chronic mania; dementia; paresis; epilepsy; imbecility; recurrent mania, paralytic with maniacal attacks—seven forms.

The Northampton Hospital gives: Mania acute, mania chronic, mania paretic, mania epileptic; typhomania; monomonia; melancholia; dementia; not insane—nine forms.

No two of the above give identical forms and accurate comparisons of results, or even approximations are impossible. There is also a lack of definite, precise statements as to the exact mental state of patients discharged. They are variously denominated "recovered," "restored," "cured," "in usual health," "improved," "very much improved," "unimproved," "stationary," etc., but there is nowhere any clear statement as to what is to be understood by these terms. A patient can only be considered "recovered," when he is free from delusions, has a healthy state of the emotions, is able to maintain composure and self-control under the ordinary wear and tear of life, and possesses sufficient mental vigor and good judgment to permit him to resume his accustomed work or pursuit in life. Had this standard been adopted in every instance, it is probable that there would have been fewer re-admissions and imperfect recoveries. A patient is only "improved" when he possesses sufficient self-control and bodily vigor to permit him to reside among friends

without requiring special care and oversight. A patient is "unimproved" when he requires the same degree of care at home he required in the asylum. Without definite prescribed standards of comparison like the above, uniformity of results in our tables is impossible. Tables of causation are equally unsatisfactory. One asylum records causes of insanity assigned by friends; another records probable causes as determined in the minds of the medical officers of the institutions. The former are at best but the guesses or fancies of persons who are not competent to weigh evidence or to decide what are efficient or what are unimportant factors in the production of mental disease. Such tabulations, to be of value, should comprehend the causes alone which the physician-in-chief of the asylum himself deems important, and where no adequate cause comes to his knowledge, after careful inquiry, it should be so recorded.

Many of the tables are useless as well as unscientific. Of what avail is it to record the "prospects of those remaining at the end of the year," or "the nativity of those recovered," or "complications of those admitted," or "how committed of those admitted," or "how supported of those admitted," etc., etc. The same may be said of tables showing cost of maintenance, supplies, wages and salaries. Wages differ in different localities: the organization and scope of asylums differ; the necessities of the same institutions differ year by year; fuel, provisions and supplies generally vary in cost in different localities and during successive years. Of what comparative value are statistics as to these matters, gathered from Maine to California, or even from Canada to Michigan? They frequently mislead, and generally create public prejudice, rather than foster public confidence.

The following suggestions are made:

1st. The number of tables should be reduced, by casting out all pertaining to matters which do not possess a strictly medical interest. The cost of maintenance, the products of farm and garden, the exhibit of the industry of the sewing room, the salaries paid officers and *employés*, should all be omitted. Tables should give facts of professional interest only.

2d. These statistical tables should be uniform, as far as practicable.

3d. They should be concise. Results should be shown in each table, as far as possible.

4th. They should not be contrived to carry out theories or to ride hobbies. Of the recent tables prepared for the "Massachusetts Board of Health, Lunacy and Charity," about one-fourth are planned to show re-admissions, relapses and the number of successive attacks, as if it were of the utmost professional importance to show that patients erroneously considered recovered, or discharged prematurely, frequently suffer from relapses, and require to be re-admitted to asylums about as often as they are unwisely discharged.

5th. These statistical tables should be utilized. A standing committee on statistical information could collate and condense, each year, for the use of the Association, all the material facts contained in the annual reports of our institutions. These condensed reports would give valuable facts as to the relative prevalence of different forms of insanity year by year, the relative frequency of outbreaks of mania or melancholia, the range of general paresis, its present field, and its rate of progress from east to west, and many other matters of intense interest, which now lie buried in reports, and which none have leisure to cull out for purposes of comparison.

In this earnest plea for more systematic therapeutical, clinical and statistical inquiries, I would not be understood as criticising the thorough work now done in connection with asylums. I have merely attempted to point out the necessity for further progress, and have suggested methods which would tend to increase the efficiency of asylum work.

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